#### **Curriculum Vitae of Saudamini Das**

Current Position: NABARD Chair Professor, Institute of Economic Growth, Delhi (Since March 2016)

Address: Institute of Ecopnomic Growth, University of Delhi Enclave, Delhi – 110007, URL: <a href="http://www.iegindia.org/staffmembers/faculty/detail/3593/3">http://www.iegindia.org/staffmembers/faculty/detail/3593/3</a>
Emails: - sdas 28@yahoo.co.in, saudamini.das@gmail.com; saudamini@iegindia.org

**Recognition: (i)** Featured article in Nature Conservancy Magazine on "Mystery of Mangroves":

http://www.nature.org/ourinitiatives/regions/northamerica/areas/gulfofmexico/summer-2010-mystery-of-mangroves.xml.

- (ii) Movie on mangroves by American Museum of Natural History, New York based on PNAS Paper <a href="http://www.amnh.org/explore/science-bulletins/(watch)/bio/news/mangrove-trees-save-lives-in-storms">http://www.amnh.org/explore/science-bulletins/(watch)/bio/news/mangrove-trees-save-lives-in-storms</a>
- (iii) Fellow, South Asian Network for Development and Environmental Economics (SANDEE), Nepal,
- (iv) Mäler Scholar (2011-12), Beijer Institute of Ecological Economics, Royal Academy of Sciences, Stockholm, Sweden

**Research areas:** Climate change adaptation, Heat waves, Impact evaluation, Loss and damage to livelihood from climate change, Natural disaster and livelihood, Natural disaster and natural buffers, Ecosystem Service Valuation, Coastal vulnerability, Mangroves and Ecosystem Services

**Education:** PhD in Economics, University of Delhi (2009); M Phil in Economics, Delhi School of Economics, University of Delhi (1987); Masters in Economics, Center for Economic Studies and Planning, Jawaharlal Nehru University, Delhi (1983); Bachelors in Economics, Samanta Chandra Sekhar College, Utkal University, Orissa, India (1981); Intermediate, Samanta Chandra Sekhar College, Utkal University, Orissa (1979); Higher Secondary, Barunei High School, village- Patapur, Board of Secondary Education, Cuttack, Orissa, India (1977)

## **Publications: Journal Articles**

1. Das, Saudamini (2018), "Unfounded assumptions in linking crop-damaging temperature and suicide in India," (letter) *Proceedings of the National Academy of Sciences of the United States of America (PNAS)*, January 9, 2018 vol. 115 no. 2 E116, doi:10.1073/pnas.1715331115

# http://www.pnas.org/content/115/2/E116.full.pdf

- Rajesh K Rai, Mani Nepal, Laxmi D Bhatta, Saudamini Das, Madan S Khadayat, E Somanathan, and Kedar Baral (2017), Ensuring Water Availability to Water Users through Incentive Payment for Ecosystem Services Scheme: A Case Study in a Small Hilly Town of Nepal, Water Economics and Policy (Online Ready)
   Link: https://doi.org/10.1142/S2382624X18500029
- 3. Das, Saudamini (2017). Moderating the Impacts of Extreme Weather Like Heat Waves Through Public Awareness Campaign. Public Administration Review, Climate Change Symposium, July. 2017.

  Link: <a href="https://publicadministrationreview.org/climate-change-symposium-extreme-weather-awareness-campaigns/">https://publicadministrationreview.org/climate-change-symposium-extreme-weather-awareness-campaigns/</a>
- 4. **Das, Saudamini,** 2017. Ecological Restoration and Livelihood: Contribution of Planted Mangroves as Nursery and Habitat for Artisanal and Commercial Fishery. *World Development*, <a href="http://dx.doi.org/10.1016/j.worlddev.2017.02.010">http://dx.doi.org/10.1016/j.worlddev.2017.02.010</a>
- 5. **Das, Saudamini**, 2016. Television is More Effective in Bringing Behavioral Change: Evidence from Heat-Wave Awareness Campaign in India. *World Development* Vol. 88, pp. 107–121, 2016 0305-750X/ll http://dx.doi.org/10.1016/j.worlddev.2016.07.009
- 6. **Das, Saudamini**, A. Mitra and R. Kumar, 2016. Do neighbourhood facilities matter for slum housing? Evidence from Indian slum clusters. *Urban Studies*, 1–17. DOI: 10.1177/0042098016634578
- Das, Saudamini, 2015. Temperature increase, labour supply and cost of adaptation in developing economies: Evidence on urban workers in informal sectors. *Climate Change Economics*, Vol. 6, No. 2, 1550007-31. DOI: 10.1142/S2010007815500074
- 8. **Das, Saudamini** and H. Sandhu, 2014. Role of Exotic Vegetation in Coastal Protection: An Investigation into the Ecosystem Services of Casuarina in Odisha. *Economic and Political Weekly*, Vol. XLIX, No. 1, pp 42-50.
- Das, Saudamini and Crépin, A.-S. 2013. Mangroves can provide protection against wind damage during storms. *Estuarine, Coastal and Shelf Science*, Vol. 134, 98-107. http://dx.doi.org/10.1016/j.ecss.2013.09.021
- 10. **Das, Saudamini** and Kanchan Chopra, 2012. Towards 'Green Growth': Measuring the Trade-off between Conservation of Protected Areas and Hydel Power Generation. *Economic and Political Weekly*, Vol. XLVII, no 51, 59-68.
- 11. **Das, Saudamini** and Stephen C. Smith, 2012. Awareness as an Adaptation Strategy for Reducing Mortality from Heat Waves: Evidence from a Disaster Risk Management Program in India. *Climate Change Economics*, Vol.3, No. 2, 1250010-39. DOI: 10.1142/S2010007812500108

- 12. **Das, Saudamini**, 2012. The role of natural ecosystem and socio-economic factors in the vulnerability of coastal villages to cyclones and storm surge. *Natural Hazards*, Vol. 64, 531-546. DOI: 10.1007/s11069-012-0255-9
- 13. **Das, Saudamini,** 2011. Examining the Storm Protection Services of Mangroves of Orissa during the 1999 Cyclone. *Economic and Political Weekly*, Vol XLVI, No 24, pp 60-68.
- 14. Parikh, Jyoti and S. Das, 2010. Gender Audit of the National Energy Policy in India, e-net Issue 2/2010, *Gender and Energy* (on line)
- 15. Vincent, J R and **Saudamini Das**, 2009. Reply to Baird et al--Mangroves and storm protection. Getting the numbers right. *Proceedings of the National Academy of Sciences*, *USA*, vol. 106, No. 40, E112 (letter on line).
- 16. **Das, Saudamini** and Jeffrey R Vincent, 2009. Mangroves protected villages and reduced death toll during Indian Super Cyclone. *Proceedings of the National Academy of Sciences, USA*, vol. 106, No. 18, PP: 7357-7360.

# **Book chapters published:**

- Das, Saudamini and Stephen C Smith, 2017. Can Educational Campaigns
   Promote Successful Adaptation to Climate Change? Evidence from a Heat Wave
   Awareness Program in Odisha. In *Global Change, Ecosystems, Sustainability:* Theory, Methods, Practice edited by P Mukhopadhyay, N Nawn and K Das,
   Sage Publications India Pvt Ltd, New Delhi, pp-156-164.
- Das, Saudamini, 2016. The Economics of Natural Disaster in Odisha. In *The Economy of Odisha: A Profile*, edited by Pulin B. Nayak, Santosh C. Panda and Prasanta K. Pattanaik, Oxford University Press, New Delhi, pp.266-301. ISBN-13:978-0-19-946478-4
- Das, Saudamini, 2015. Effects of Climate Change and Heat Waves on Low Income Urban Workers: Evidence from India. In *Inequality and Climate Change: Perspectives from the South*, edited by Gian Carlo Delgado Ramos, Dakar, CODESRIA (Council for the Development of Social Science Research in Africa), pp. 171-189, ISBN: 978-2-86978-645-5
- 4. Das, Saudamini, 2011. Can Mangroves Stem Property Loss during Big Storms? An Analysis of House Damages due to the Super Cyclone in Orissa. In *Valuing the Invaluable: The Practice of Environmental Valuation in South Asia*, edited by A. K. Enamul Haque, M. N. Murthy and P. Shyamsunder, Oxford University Press, New Delhi, pp.170-210. ISBN: 978-1-107-00714-7
- 5. Das, Saudamini, 2010. Valuing the Storm Protection Services of Mangroves: Methodological and Data challenges. In *Valuation of Regulating Services of*

- *Ecosystems: Methodology and Applications*, edited by Pushpam Kumar and Mike Wood, Rutledge, London, pp. 123-150. ISBN-13:978-0-415-56987-3
- Das, Saudamini, 2007. Storm Protection Values of Mangroves in Coastal Orissa. In *Ecology and Human Well-Being*, edited by Pushpam Kumar and B. Sudhakar Reddy, Sage Publications, New Delhi, pp. 197-212. ISBN: 9780761935537

## **Working Papers published:**

- Das, Saudamini, 2015. "Evaluating the Role of Media in Averting Heat Stroke Mortality: A Daily Panel Data Analysis", South Asian Network for Development and Environmental Economics (SANDEE) Working Paper No. 103–15, PO Box 8975, EPC 1056, Kathmandu, Nepal.
- Das, Saudamini, 2014. "Heat waves decrease labour supply: Evidence on low-income urban workers in weather-exposed occupations" Institute of Economic Growth Working Paper No E/338/2014
- 3. Das, Saudamini and Stephen C. Smith, 2012. "Awareness as an Adaptation Strategy for Reducing Mortality from Heat Waves: Evidence from a Disaster Risk Management Program in India, Working Paper, No 72–12, South Asian Network for Development and Environmental Economics (SANDEE) Working Paper, PO Box 8975, EPC 1056, Kathmandu, Nepal.
- 4. **Das, Saudamini** and Stephen C. Smith (2012), "Awareness as an Adaptation Strategy for Reducing Mortality from Heat Waves: Evidence from a Disaster Risk Management Program in India", *IIEP-WP-2012-06*, *Institute for International Economic Policy Working Paper Series*, *Elliott School of International Affairs*, *The George Washington University*.
- Das, Saudamini (2009), "Can Mangroves Minimise Property Loss during Big Storm? An Analysis of House Damage due to the Super Cyclone in Orissa", South Asian Network for Development and Environmental Economics (SANDEE) Working Paper No 42-09, Kathmandu, Nepal.
- 6. **Das, Saudamini** (2009), "Addressing Coastal Vulnerability at the Village level: Role of Socio-economic and Physical Factors", *Institute of Economic Growth Working Paper No E/295/2009*, Delhi.
- 7. Das, Saudamini (2008), "Mangroves Provide Protection during Cyclones: Evidences from the Super Cyclone of October 1999 in India", Fondazione Eni Enrico Mattei (FEEM) Working Paper / Doctoral Series, 2.08, Milano, Italy
- 8. **Das, Saudamini**, 2007. "Storm Protection by Mangroves in Orissa: An Analysis of the 1999 Super Cyclone," *South Asian Network for Development and Environmental Economics (SANDEE) Working Paper No 25-07*, Kathmandu, Nepal.

## Policy Briefs published from research:

- Nepal, M., Das, Saudamini, Rai, R.K., Bhatta, L.D., Somanathan, E., Kotru, R., Khadayat, M.S., Rawal, R.S., and Negi, G.C.S. (2017). Assessing Ecosystem Services in the Kailash Sacred Landscape, *ICIMOD-SANDEE- GBPNIHESD Policy Brief, Number 2017/1*, June 2017
- 2. Das, S, (2016), Media and awareness campaigns are effective in reducing the impact of heat waves, *SANDEE Policy Brief* Number 97–16, 2016
- 3. Das, S and Sandhu, H (2014), "Casuarina Monocultures are not Effective Coastal Shelterbelts: Some evidence from Odisha", *Institute of Economic Growth Policy Brief*, 8/2014
- 4. Das, S (2012), "Do Awareness Campaigns Save Lives? Assessing the Odisha Government's Efforts to Reduce the Impacts of Heat Waves", *SANDEE Policy Brief, Number 64-12*, November 2012
- 5. Das, S (2007), "Mangroves A Natural Defense against Cyclones: An investigation from Orissa, India", *SANDEE Policy Brief, Number 24-07*, September 2007

# Other publications and Activities:

- Nepal, M., Das, S., Rai, R.K., Bhatta, L.D., Somanathan, E., Kotru, R., Khadayat, M.S., Rawal, R.S., and Negi, G.C.S. (2017). Valuation of ecosystem services in the Kailash Sacred Landscape. SANDEE-ICIMOD Research Report, 2017/2. Kathmandu: ICIMOD
- 2. **Das, Saudamini** (2016), "Coastal Marine Ecosystems and Ecosystem Services" background paper in *'TROPMET 2016'* Souvenir published for the international symposium on 'Tropical Meteorology: Climate Change and Coastal Vulnerability' as a part of the Diamond Jubilee Year Celebration of the Indian Meteorological Society (IMS) by the Bhubaneswar Chapter of IMS.
- 3. Organized a special session on "Resilience to coastal disasters: pathways to resilience-building of vulnerable coastal communities" for the first SIMSEA (Sustainable Initiative for the Marginal Seas of South and East Asia) Symposium held in University of Philippines, Velasquez St., Diliman, Quezon City 1101, Philippines during 26-28 September, 2016. Presented her research on "Resilience to natural disasters: Analyzing the role of coastal ecosystems in enabling resilience of coastal communities post a natural disaster" at the Symposium.
- **4.** Organized a special panel on "Coastal Ecosystems" for the *TROPMET 2016*, international conference organized by Indian Meteorology Department (Bhubaneswar), Indian Institute of Technology (Bhubaneswar), Government of Odisha and Siksha O' Anusandhan University, Bhubaneswar during 18-21 December 2016 as a part of the Diamond Jubilee Year Celebration of the Indian Meteorological Society.

Other memberships: (i) South Asia Representative, Sustainable Initiative for the Marginal Seas of South and East Asia (An Initiative under Future Earth) (ii) Senior Research Fellow, Environment for Development (EfD) Initiative, University of Gothenburg, Sweden; (iii) Member, Centre for research on the Economics of Climate, Food, Energy and Environment (CECFEE), Indian Statistical Institute, Delhi; (iv) Member, Executive Committee, Indian Society for Ecological Economics; (v) Member, European Association for Environmental and Resource Economists; (vi) Member, National Scientific Advisory Committee, TROPMET 2016

**Teaching and Research Experience: (i)** Associate Professor (in research), Institute of Economic Growth, Delhi (May 2012- Feb 2016); (ii) *Post graduate Teaching* --M.Com, Delhi School of Economics, University of Delhi (2000 – 2011) & Masters in International Business, Department of Commerce, Delhi School of Economics, University of Delhi (2002 – 2005); (iii) *Under graduate Teaching* – (a) Dept of Economics, Swami Shradhanand College, University of Delhi (1987 – 2012); (b) Dept of Economics, Daulat Ram College, University of Delhi (1985-86) & (c) Dept of economics, Sri Ram College of Commerce (1984-85)

### Research Reports submitted

- 1. Das, Saudamini (September 2017). Tradeoff between economic activities and ecological index: Measuring the impact of upstream mining and industrial activities on mangroves and ecological diversity of Bhitarkanika Wild Life Park. Submitted to Mangrove For Future (MFF), International Union for Conservation of Nature (IUCN), Delhi Office
- Nepal, M., Das, S., Rai, R.K., Bhatta, L.D., Somanathan, E., Kotru, R., Khadayat, M.S., Rawal, R.S., and Negi, G.C.S. (2017). Valuation of ecosystem services in the Kailash Sacred Landscape. SANDEE-ICIMOD Research Report, 2017/2. Kathmandu: ICIMOD
- 3. Das, Saudamini (2016). Role of coastal ecosystems in enabling resilience of coastal communities post a natural disaster. Submitted to Mangrove For Future (MFF), International Union for Conservation of Nature (IUCN), Delhi Office
- 4. **Das, S** (2015), Research report on "Accounting for regenerated forests: Evaluating the flow of Ecosystem Services from regenerated mangroves compared to original mangrove forest", Submitted to Ministry of Environment,

Forest and Climate Change, Government of India and Deutsche Gesellschaft fuer Internationale Zusammenarbeit (GIZ) GmbH, Germany, May 2015

- 5. Das, S (2014), Research Report on the study "Lessons learnt from Cyclone Phailin on Community Preparedness, Response and Role of State Institution: A Report outlining the Resilience Building Approach to Disaster Management for the State of Odisha" Submitted to Odisha State Disaster Management Authority, Government of Odisha and UNDP Odisha, Bhubaneswar, October, 2014
- 6. Chopra, K and S. Das (2010), Report on "India Environmental Outlook 2030: Opportunities for growth in the ecologically fragile hill states: a study of Himachal Pradesh", Submitted to World Bank, Delhi Office, April 2010.

#### Journal reviewer:

Journal of Quantitative Economics, Climate Change Economics, Environment and Development Economics, Ecosystem Services, Ecological economics; Estuarine, Coastal and Shelf Sciences; International Journal of Environment and Sustainable Development; Advances in Geosciences (ADGEO); International Journal of Disaster Risk Reduction (IJDRR)

### In Press:

Five states home to over 50% of India's slums: Chhattisgarh, Odisha, Jharkhand, Tamil Nadu and Bihar top list

http://www.firstpost.com/india/five-states-home-to-over-50-of-indias-slums-chhattisgarh-odisha-jharkhand-tamil-nadu-and-bihar-top-list-4177779.html

 $\frac{http://www.business-standard.com/article/current-affairs/five-states-have-half-of-india-s-slums-research-117102900136\_1.html$ 

Rethinking India's Slum Resettlement Policy:

https://www.citylab.com/solutions/2017/06/a-case-for-improving-not-relocating-indias-urban-slums/529710/

There's a simple reason why Indians return to the slums after they've been given better housing:

https://qz.com/1003519/attached-baths-running-water-street-lights-what-indias-

slumdwellers-seek-in-a-home/

Feeling the heat: Can TV ads change how we act?

http://emiguel.econ.berkeley.edu/assets/miguel media/740/Collidoscope The Wire Of

Segmented Markets Intimate Relationships and War.pdf

India, Pakistan feels the heat:

http://www.chinadailyasia.com/business/2013-08/23/content 15084445.html

Media campaign effective in combating heat wave mortality:

http://bigwire.in/2016/08/25/media-campaign-effective-in-combating-heat-wave-mortality/

Media And Lowering Temperatures:

http://theindianeconomist.com/media-and-lowering-temperatures/#

https://www.linkedin.com/company/the-indian-

<u>economist/comments?topic=6179284724700278784&type=U&scope=6413426&stype=C&a=7cBS</u>

https://twitter.com/TieSpeaks/status/773476663728320513

https://plus.google.com/u/0/+TheindianeconomistSpeaks/posts/SRTytM8n5kh

https://www.facebook.com/TheIndianEconomist/posts/1204475396258844

### Mangrove work in press:

http://www.hindustantimes.com/News-Feed/Bhubaneshwar/Mangroves-best-defence-against-cyclones/Article1-255827.aspx

http://m.oneindia.in/news/2009/04/15/mangroveforests-saved-lives-in-indian-super-cyclone-in1999.html

http://www.sciencedaily.com/releases/2009/04/090414172924.htm

http://www.scidev.net/en/news/mangroves-protect-coastal-villages-during-cyclones.html http://www.redorbit.com/news/science/1669832/mangroves\_can\_save\_lives\_in\_cyclones

http://www.econbiz.de/en/search/detailed-view/doc/mangroves-a-natural-defense-

against-cyclones-an-investigation-from-orissa-india-das-

saudamini/10005487691/?no cache=1

http://www.universityworldnews.com/article.php?story=20090416200117863

http://www.thehindu.com/books/field-notes-from-environment-

researchers/article584275.ece

http://newindianexpress.com/states/odisha/article119016.ece?service=print

### You tube movie

1. "Economic cost-benefit analysis of coastal land" at UNDP workshop, Bangkok, October 2012

http://www.youtube.com/watch?v=zM4tgAYhr5A

2."Assessing whether adapting to heat waves works" at UNDP workshop, Bangkok, October 2012

http://www.youtube.com/watch?v=bdGEn-yu0Ss

### **Specialized courses attended:**

- 1. "Valuing and Designing Payment Systems for Ecosystem Services", pre-conference course organized by Beijer Institute of Ecological Economics before the 22<sup>nd</sup> EAERE Conference, ETH Zurich, Switzerland, 21-22<sup>nd</sup> June, 2016
- 2."Economics of Environmental Regime Shifts" pre-conference course organized by Beijer Institute of Ecological Economics before the 19<sup>th</sup> EAERE Conference.
- 3. "Economics of Tiger Conservation", organized by Conservation Strategy Fund, Duke Environmental Leadership Program, The World Bank Institute and Global Tiger Initiative at the Duke University, North Carolina, USA, Nov 2010
- 4. "Applying game theory and behavioral economics to the environment", preconference course organized by the Beijer Institute of Ecological Economics at University of Qubec, Montreal, Canada, June 2010 before World Congress on Environmental and Resource Economics, 2010
- 5. "Advanced Econometrics" organized by SANDEE, Kathmandu, July 2007
- 6. "Econometrics and training in STATA" organized by SANDEE, Colombo, Sri Lanka, December 2005.
- 7.10 (Ten) Research and Training workshops of SANDEE between 2005-07 and 2010-12

# **Project on going:**

- 'Climate change, livelihood diversification and well-being in rural Odisha' (with A Mitra, A Tripathy, TK Sarangi, and T Ranganathan), Indian Council of Social Science Research, Delhi
- 2. "Trade-off between economic activities and ecological index: Measuring the impact of upstream mining and industrial activities on mangroves and ecological diversity of Bhitarkanika wild life sanctuary" Mangrove For Future, IUCN India

### **Projects completed:**

1. "Accounting for regenerated forests: Evaluating the flow of Ecosystem Services from regenerated mangroves compared to original mangrove forest", TEEB India Initiative (TII), Ministry of Environment, Forest and Climate

- Change, Government of India and GIZ (Deutsche Gesellschaft fuer Internationale Zusammenarbeit (GIZ) GmbH; Germany) Delhi.
- 2. "Community response to storm warning and role of costal vegetation during cyclone Phaillin in Odisha" IEG Seed grant Project
- 3. "Lessons learnt from Cyclone Phailin on Community Preparedness, Response and Role of State Institution: Outlining the Resilience Building Approach to Disaster Management for the State of Odisha" Orissa State Disaster Management Authority, Government of Odisha, Bhubaneswar
- 4. Climate Change and cost of labour market adaptation to global warming in developing economies, January 2013 to September 2013, IEG Seed grant Project
- 5. Adaptation to Heat Waves: Evaluating the role of Awareness Campaign as an effective strategy to avert health risk (July 2010 March 2013) sponsored by the South Asian Network for Developmental and Environmental Economics (SANDEE), Nepal
- 6. India Environmental Outlook 2030: Opportunities for growth in the ecologically fragile hill state of Himachal Pradesh (2009) with Prof Kanchan Chopra for the Office of the World Bank, New Delhi
- 7. Evaluation of storm protection services of mangroves and the Super Cyclone of October 1999 in Orissa(2005-2007) sponsored by the South Asian Network for Developmental and Environmental Economics (SANDEE), Nepal

#### Oral Presentations of Research: As resource person

- Estimating Count models in Environmental research: STATA exercises, Lecture 4 to MA Eco students of University of Petroleum and Energy Studies, Dehradun, 12<sup>Th</sup> April (12 – 1.30 PM), 2017
- 2. Impact Evaluation of Public Policy and use of Difference-in-Differences (DID) technique, Lecture 1 to MA Eco students of **University of Petroleum and Energy Studies, Dehradun**, 11<sup>Th</sup> April (2 3.30 PM), 2017
- 3. Applying DID in Climate Change Adaptation research, Lecture 2 to MA Eco students of **University of Petroleum and Energy Studies, Dehradun,** 11<sup>Th</sup> April (4 5.30 PM), 2017
- 4. Econometric modelling of count data, Lecture 3 to MA Eco students of University of Petroleum and Energy Studies, Dehradun, 12<sup>Th</sup> April (10 11.30 AM), 2017
- 5. Estimating Count models in Environmental research: STATA exercises, Lecture 4 to MA Eco students of University of Petroleum and Energy Studies, Dehradun, 12<sup>Th</sup> April (12 1.30 PM), 2017
- 6. "Approach to Economics of Adaptation: Econometrics", Workshop on 'Cross-CARIAA(Collaborative Adaptation Research Initiative in Africa and Asia) Dialogue on Economics of adaptation: Setting agenda for incremental and transformative change', TERI University, Delhi, 12<sup>th</sup> January 2017

- 7. "Measuring Impacts: Difference-in-Differences (DID)", NABARD Chair IEG & INSEE Research methodology workshop on impact evaluation of issues related to climate change and agriculture, 9th February 2017, Delhi
- 8. "Valuation of Ecosystem Services and Societal Well-Being", Seminar by the Department of Economics on the occasion of Golden Jubilee celebration of the Swami Shradhanand College, Alipure, Delhi 36, 28<sup>th</sup> February 2017
- 9. "Role of Ecosystems in Climate Change Adaptation: Mangroves Protect from Storm and Ensure Social Security" Indian Civil Accounts Service Officers Training, Institute of Economic Growth, March 21<sup>st</sup>, 2017
- 10. "Valuation of coastal resources: production function, damage function approach", Training Programme on "Applied Economic Tools and Techniques for managing Environmental Resources", 5<sup>th</sup> October, 2016, TERI University, Delhi
- 11. Climatic extreme events and rural livelihood, Orientation Programe on "Rural Livelihoods and Well-being", Institute of Economic Growth, **Delhi**, 4<sup>th</sup> May 2016
- 12. Ecosystem Services and Sustainable Development: Mangroves Protect from Storm and Ensure Social Security, Refresher Course by CPDHE, University of Delhi, 28<sup>h</sup> October 2015
- 13. Economics of Measuring Impacts, Workshop on MFF National Results Sharing, BRAC Center, 75 Mohakhali, Dhaka, 29-30 July 2015,
- 14. Evaluating the mangrove-fishery link for regenerated mangrove forests, IUCN-IDS meeting, Colombo, Sri Lanka, 24<sup>th</sup> Feb 2015
- 15. Using count models in economic analysis, **Institute of Economic Growth, Delhi**, 12<sup>th</sup> December 2014
- 16. Climate Change and Awareness as an Adaptation Strategy, CHPDHE Orientation Programme, **University of Delhi, Delhi** 110007, 24<sup>th</sup> November 2014
- 17. "Natural buffers, disaster management and evaluation: Implications for ocean economies", School of Development Studies, **Yunnan University, Kunming, People's Republic of China,** 11<sup>th</sup> October, 2013
- 18. Mangrove valuation for disaster management, Refresher course for in-service officers of Indian Statistical Services, Indian Institute of Forest Management, **Bhopal, India**, 31<sup>st</sup> July, 2013

- **19.** Ecosystem Services and Sustainable Development: Mangroves Protect from Storm and Ensure Social Security, Refresher course for Delhi University teachers, CPDHE, University of Delhi, **Delhi, India** 11<sup>th</sup> January, 2013
- **20.** Use of count models in economic analysis, Ph D students workshop at Institute for Studies in Industrial Development, 9<sup>th</sup> January, **Delhi, India**
- 21. Capacity building program on the Economics of Climate Change Adaptation: Regional consultation on capacity building needs in Asia organized by USAID, UNDP, ADAPT-Asia Pacific and Yale University, **Bangkok**, **Thailand**. 24-26 Oct, 2012.
- 22. SANDEE SDPI Proposal writing workshop, **Islamabad, Pakistan**, 14<sup>th</sup> September, 2012
- 23. Economic valuation of mangroves, Policy workshop on Coastal and Marine biodiversity organized by Ministry of Environment and Forest and GIZ, Germany, **Gandhinagar, Gujurat**, India, 12-13<sup>th</sup> April, 2012
- 24. Two lectures on Impact Evaluation of public policy for students of Environment and Development, Sanford School of Public Policy, **Duke University NC**, **USA**, 1<sup>st</sup> and 9<sup>th</sup> Feb. 2012
- 25. Planting exotic species for coastal protection: Evaluating the storm protection services of native vs. exotic species, IFS probationers training, Forest Research Institute, **Dehradun**, 2<sup>nd</sup> June, 2011
- 26. Wild Life Institute of India, **Dehradun**, 31<sup>st</sup> August 2010
- 27. Refresher Course for the Teachers of University of Delhi organized by CPDHE (Centre for Professional Development in Higher Education), **University of Delhi**, 20<sup>th</sup> Oct 2009.
- 28. Economic Approaches to Climate Change and Poverty: a workshop for Economic Policy makers and Researchers in Bangladesh jointly organized by UNDP, UNEP, SANDEE and Planning Commission of **Bangladesh**, **Dhaka** on 14<sup>th</sup> Oct 2009.
- 29. IFS Officers training, Forest Research Institute, **Dehradun, India**, 28<sup>th</sup> May, 2009
- 30. Training Workshop on the Science, Economics and Institutions of Managing and Paying for Eco-system Services, organized by SANDEE, EEPSEA and ICRAF in Chiang Mai, Thailand, 26<sup>th</sup> April, 2009
- 31. Workshop on Ecosystem services Valuation and Policy Issues: Tata Energy Research Institute (TERI), **New Delhi,** 11th Feb, 2009
- 32. National Training Course on Environment and Disasters, National Institute of Disaster Management (NIDM), New Delhi, 15th January 2009
- 33. Workshop on Banking on Mangroves: a case for investing in coastal ecosystems jointly organized by The International Union for Conservation of Nature (IUCN), Pakistan and South Asian Network for Development and Environmental Economics (SANDEE), Karachi, Pakistan, 27-29 Nov 2008

34. Regional Technical Workshop on Coastal protection in the Aftermath of the Indian Ocean Tsunami: What Role for Forests and Trees? Organized by Food and Agricultural Organization (FAO), United Nations, **Khao Lak, Thailand**, 28-31<sup>st</sup>, August 2006

# **Presentations in Conference / Workshop**

- 1. Mangrove plantation and coastline changes: Does planting mangroves reduce erosion? *International Society for Ecological Modelling Global Conference 2017 (ISEM2017), 20<sup>th</sup> September 2017, Jeju Island, South Korea*
- 2. The impact of upstream mining and industrial activities on mangroves and ecological diversity of Bhitarkanika Wild Life Park, *Nineteenth Meeting of the National Coordination Body (NCB) Mangroves for Future (MFF), 13<sup>th</sup>* September, 2017 Delhi
- 3. "Institutional capacity building, social heterogeneity, and evacuation behavior: Cyclone management in India", Workshop on "Adapting to Climate Change: Actions, Implementations, and Outcomes" University of Notre Dame, Indian, USA, April 30<sup>th</sup>, 2017
- 4. "Conservation and regeneration of mangroves for saving lives and livelihood: Evidences from Odisha and Gujarat" TROPMET 2016, National Symposium on 'Tropical Meteorology: Climate Change and Coastal Vulnerability' of Indian Meteorological Society (IMS), Bhubaneswar, Odisha 20<sup>th</sup> Dec 2016
- "Evaluating ecological restoration: Contribution of planted mangroves as nursery and habitat for artisanal and commercial fishery" 10th EfD (Environment for Development, Gothenburg University, Sweden) Meeting at Pucón, Chile, 12<sup>th</sup> November 2016
- 6. "Super cyclone of Oct 1999 and Storm protection by Bhitarkanika mangroves" Wildlife Institute of India meeting with IUCN leaders for declaring Bhitarkanika National Park as World Heritage Site, India International Center, Delhi, 2<sup>nd</sup> Nov 2016
- 7. "Residual (uncompensated) effect of climate Extremes on livelihood: Estimates for state of Odisha", 2nd CECFEE (Center for Research on the Economics of Climate, Food, Energy and Environment, Indian Statistical Institute, Delhi) Workshop, Ranthambhore, India, 16<sup>th</sup> October 2016
- **8.** "Resilience to natural disasters: Analyzing the role of coastal ecosystems in enabling resilience of coastal communities post a natural disaster" Regional

- Symposium of the SUSTAINABILITY INITIATIVE IN THE MARGINAL SEAS OF SOUTH AND EAST ASIA (SIMSEA), 27th September 2016, Microtel by Wyndham, Diliman Quezon City, Philippines
- 9. Climate Extremes and Consequent Loss and Damage in Livelihood Sectors: Estimates for state of Odisha, GIZ Workshop on L&D, The Claridges, **New Delhi**, 9<sup>th</sup> September 2016
- Climate Extremes and Consequent Loss and Damage in Livelihood Sectors, International Conference on Climate Change, Tata Institute of Social Sciences, Mumbai, 30<sup>th</sup> July 2016
- 11. Visual media is more effective in averting heat stroke mortality through behavioral changes: A daily panel data analysis, 22<sup>nd</sup> Annual Conference of the European Association of Environmental and Resource Economists (EAERE), ETH Zurich, Swiss Federal Institute of Technology, Zurich, Switzerland, 23<sup>rd</sup> June, 2016
- 12. Mangroves Green coastal infrastructure, MOEFCC, GIZ and SANDEE workshop on "Valuing, Managing and Investing in Ecosystem Services in South Asia", Habitat Center, **New Delhi**, 28<sup>th</sup> April 2016
- 13. Economics of vulture safe zone and captive breeding, MOEFCC, GIZ and SANDEE workshop on "Valuing, Managing and Investing in Ecosystem Services in South Asia", Habitat Center, **New Delhi**, 29<sup>th</sup> April 2016.
- 14. Resilience to natural disasters: Analyzing the role of coastal ecosystems and socio-economic factors in enabling resilience of coastal communities to cyclones, at International Union for Conservation and Mangrove for Future office, **New Delhi**, 12<sup>th</sup> March 2016
- 15. Value of planted mangroves as nursery and habitat for artisanal and commercial fishery: Estimates from Gujarat, India, **BIOECON Conference**, **King's College**, **Cambridge**, **UK**, 14<sup>th</sup> September 2015
- 16. Heat waves, Labour Supply and Private cost of Adaptation in Developing Economies: Evidence on Urban Workers in Informal Sectors, 21<sup>st</sup> Annual **EAERE** Conference, **University of Helsinki**, **Helsinki**, 27<sup>th</sup> June 2015
- 17. Accounting for regenerated forests: Evaluating the flow of ES from regenerated mangroves compared to original mangrove forest, TEEB INDIA INITIATIVE (TII) Stakeholders meeting, **Delhi** 5<sup>th</sup> Feb 2015
- 18. Accounting for regenerated forests: Evaluating the flow of ES from regenerated mangroves compared to original mangrove forest, TEEB India Initiative (TII) Mentoring Workshop, **Chennai**, 10<sup>th</sup> April 2015
- 19. Accounting for regenerated forest: --- original mangrove forest, TEEB INDIA INITIATIVE (TII) Stakeholders meeting, **Delhi** 5<sup>th</sup> Feb 2015

- 20. TEEB for Vultures -An economic assessment of ecosystem services provided by India's Vultures, A case study from the Kanha-Pench Corridor: Valuation Methodology, TEEB India Stakeholders Meeting on Vulture project, 27<sup>th</sup> January, Delhi, India
- 21. Growth and 'Ecosystem Services for Poverty Eradication' paradigm, **Institute of Economic Growth**, **Delhi**, 15<sup>th</sup> December 2014
- 22. Economic Valuation of Coastal Resources: Mangroves of Odisha Coast and coastal protection, Bay Of Bengal Large Marine Ecosystem (BOBLME) Workshop, **Phuket**, **Thailind**, 3<sup>rd</sup> December 2014
- 23. Economic Valuation of Natural Resources: Valuation of Mangroves of Odisha Coast, Gujarat Institute of Desert Ecology, **Bhuj, Kachchh, Gujarat** 14<sup>th</sup> Nov 2014
- 24. Community Preparedness, Response & role of State Institutions during PHAILIN: Outlining the Resilience Building Approach to Disaster Management for Odisha, Orissa State Disaster Management Authority (OSDMA), **Bhubaneswar**, 26<sup>th</sup> September, 2014
- 25. Heat Waves, urbanization induced migration and health, National Health Mission Workshop, **Institute of Economic Growth, Delhi**, 11<sup>th</sup> September 2014
- **26.** Heat Waves decrease labour supply: Evidence on low-income urban workers in weather-exposed occupations, South-South International Conference: Inequality and Climate Change, Perspective from the South, **Dakar, Senegal**, 24<sup>th</sup> July 2014
- 27. Accounting Ecological Capital for Adjusted Net Domestic Product, Greening India's Growth, A Joint ICRIER, Global Green Growth Institute and World Bank Conference on Balancing Growth and Environmental Sustainability, India Habitat Centre, New Delhi, 12<sup>th</sup> June 2014
- 28. "Accounting for regenerated forests: Evaluating the flow of ES (nursery ground for fish fry) from regenerated mangroves compared to original mangrove forest", *TEEB INDIA INITIATIVE Workshop, 15th April, 2014,* **Delhi**.
- 29. "Economic Valuation of Ecosystem Services: Challenges and way out", SANDEE
   ATREE Workshop on Measuring, Valuing and Managing Ecosystem Services,
   Bangalore, 14th April 2014
- 30. "Evaluating the role of Audio, Video and Print media in averting heat stroke mortality: A daily panel data analysis", *The Indian Econometric Society (TIES) & Centre for Economic and Social Studies (CESS)* Seminar on *Applications of Panel Data, CESS campus, Hyderabad*, 26th March 2014

- 31. "Does clean neighbourhood matter for slum housing? Evidence from Indian slum clusters", Conference on "Growth and Social Transformation", Institute of Economic Growth, University of Delhi Enclave, Delhi, 22nd March, 2014
- 32. "Adapting to heat waves: Cost estimates for urban informal sector workers", Centre for Science Education (CSE) Round Table on Loss, Damage and Liability from Climate Change, India Habitat Centre, Delhi, 15th February, 2014,
- 33. "Economic Valuation of Mangroves" *CMS VATAVARAN*: International Environment & Wildlife Film Festival and Forum, Indira Gandhi National Centre for Arts (IGNCA) Lawn, Delhi, 2nd February 2014
- 34. "Media use in public health communication on heat waves: Examining the effective medium", Winter School, Delhi School of Economics, **University of Delhi, Delhi**, 18th December 2013
- 35. "Does awareness help to adapt to Climate Extreme? Evidence from disaster risk management program for Heat Waves in Odisha", SANDEE panel on "Climate Change and Adaptation", INSEE biannual conference, **Tezpur University**, **Assam**, India, 6th December 2013
- 36. "Role of exotic vegetation in coastal protection: An investigation into ecosystem services of Casuarina Equisetifolia in Odisha, India" ECSA53-Estuaries and coastal areas in times of intense change, **Shanghai**, **China**, 16th October, 2013
- 37. "Examining storm protection of mangroves against wind damage of a storm", ECSA53-Estuaries and coastal areas in times of intense change, **Shanghai**, **China**, 16th October, 2013
- 38. "Media use in public health communication on heat waves: Examining the effective medium", 26th SANDEE Research & Training Workshop, The Tide Resort, **Bangkok**, **Thailand**, 19th June, 2013
- 39. "Does awareness help to adapt to heat stress? Evidence from disaster risk management program in Odisha" SANDEE Summer School in Environment and Resource economics, **Bangkok, Thailand**, 10th May 2013
- 40. "Towards Green Growth: Measuring trade off...", Department of Analytical & Applied Economics, **Utkal University**, **Bhubaneswar**, India 19th January 2013
- 41. "Adaptation to Heat Waves: Evaluating the role of Awareness Campaign as an effective strategy to avert health risk", State Institute of Health and Family Welfare (SIHFW), **Bhubaneswar**, 17th January 2013
- 42. Economics of Natural Disasters in Odisha, Symposium on Handbook of Odisha, Nabakrushna Choudhury Center for Development Studies, **Bhubaneswar**, **Odisha**, 6-8 Dec, 2012.
- 43. Awareness as an adaptation strategy to heat waves, 5th South Asia Economic Summit, **Islamabad, Pakistan**, 11-14 September, 2012
- 44. How good are substitutes for ecosystem services? Evidence from storm protection in India, 19th **EAERE** Conference, University of Economics, **Prague, Czech Republic**, 28th June, 2012.
- 45. Towards 'green growth': Measuring ---- Northern India, ISEE Conference, **Rio de Janeiro**, **Brazil**,19th June, 2012.

- 46. Awareness as an adaptation strategy for averting health risk from Heat Waves in India, IEG Panel at ISEE Conference, **Rio de Janeiro**, **Brazil**, 17th June, 2012
- 47. Role of natural buffer in disaster management: Mangroves and Storm protection, **Planet Under Pressure Conference**, **London**, 26-29th March, 2012
- 48. "Do mangrove provide storm protection from wind damages of storms", Mangrove Laboratory, Vrije Universiteit Brussel (VUB) and Université Libre de Bruxelles (ULB), **Brussels, Belgium**, 26th Jan 2012
- 49. "Role of Mangroves in Disaster Management" at Workshop on "The economics of Marine and Coastal Ecosystems" organized by Department of Marine and Coastal Resources, Government of Thailand in partnership with the Mangrove for Future, IUCN, and UNDP at **Bangkok, Thailand**, 17th 19th Aug, 2011
- 50. International Conference on "Economics of Adaptation to Climate Change in Low-Income Countries", jointly organized by the Institute for International Economic Policy, the Department of Economics, and the Center for International Science and Technology Policy at George Washington University in Partnership with the World Bank Development Research Group and the United Nations Development Program Environment and Energy Group (Global Environmental Finance Team) at the Elliott School of International Affairs, GWU, 1957 E Street, NW, Washington, D.C. 20052, 19<sup>th</sup> May 2011.
- 51. Mangrove and Storm Protection May Brown Bag organized by The South Asia Environment, Water Resources and Climate Change Unit (SASDI) & Environment Department (ENV) of **The World Bank, Washington DC, USA**, May 18th 2011
- 52. The 13th International Conference of the International Association of the Study of the Commons (IASC) at **Hyderabad** in January 2011.
- 53. International Conference on "Environment and Development" of South Asian Network for Development and Environmental Economics at Kathmandu, Nepal in December, 2010.
- 54. Sanctuary Asia, Forest department (Government of West Bengal), National Tiger Conservation Authority (Government of India), Bengal Tiger Line and Wildlife Conservation Trust Symposium, **Kolkata**, 26th August 2010
- 55. World Congress on Environmental and Resource Economics 2010, University of Quebec, **Montreal, Canada**, 2nd July 2010
- 56. ATREE INSEE Workshop, Bangalore, 23rd June 2010
- 57. Forest Officers Training Workshop, TERI, FRI, Dehradun, 24th May, 2010
- 58. Economics of Climate Change Adaptation: Issues, Methodologies and Estimates for India, Madras School of Economics, **Chennai**, 13th February 2010.
- 59. International Workshop on Deltas, Vulnerability and Management, LOICZ Workshop, Anna University, **Chennai**, 8th Dec 2009
- 60. International Conference on Climate Change and Sustainable use of Natural Resources, IASCA, **Gwalior**, 12th November, 2009
- 61. Second India Disaster Management Congress, Vigyan Bhawan, New Delhi, 4th Nov 2009.
- 62. 17th EAERE Conference, VU University, **Amsterdam, The Netherlands**, 24th 27th June, 2009

- 63. SCAPES International Workshop on Valuation of Regulating Services of Ecosystems: From Theory to Practice, organized by University of Liverpool and ATREE, **Bangalore**, 15 16th, June, 2009
- 64. International Conference on Green Growth, **IBS Hyderabad**, India, 17 18 Dec, 2008
- 65. Institute of Economic Growth, **Delhi**, India, 14th Nov, 2008
- 66. 14th Annual Sustainable Development Research Conference, **New Delhi**, India, 21-23 Sept, 2008,
- 67. 2008 EAERE-FEEM-VIU Summer School on Space in Unified Models of Economy and Ecology, Venice, Italy 10th July, 2008
- 68. 16th EAERE Annual Conference, Gothenburg, Sweden, 28th June, 2008
- 69. Policy Dissemination Workshop for Government officers, parliamentarians, NGOs, Study Area representatives, Press and prominent public figures for the project "Evaluation of the Storm Protection Services of the Mangroves and the Super Cyclone of October 1999 in Orissa", **Bhubaneswar**, **Orissa**, 7th Nov, 2007
- 70. Inter Governmental Panel for Climate Change (IPCC) Dissemination Workshop, **Kolkata**, India, 11-12th Oct, 2007
- 71. The 2nd LOICZ Symposium on Social-Ecological System Analysis, a part of the XV International Conference of the Society for Human Ecology (SHE), **Rio de Janeiro**, **Brazil**, 4-7th Oct 2007.
- 72. National Conference on Expanding Freedom: Towards Social and Economic Transformation in a Globalizing World, The Institute of Economic Growth (IEG), University of Delhi Enclave, **Delhi**-110007, 11-13th April, 2007
- 73. National Seminar on National Environment Policy-2006: Objectives, Strategies and Implementation organized by the department of economics, Jamia Milia Islamia in association with the Nelson Mandela center for Peace and conflict Resolution, **Jamia Milia Islamia**, **New Delhi**, 20-21st February, 2007
- 74. International Conference jointly organized by International Society for Ecological Economics (ISSE) and Indian Society of Ecological Economics (INSEE), **New Delhi**, India, 16–19<sup>th</sup> December 2006
- 75. International Conference on Ecology and Human Well-being, organized by the Indian Society of Ecological Economics (INSEE), Indira Gandhi Institute of Development and Research (IGIDR), **Mumbai**, June, 2004
- 76. National Seminar on Women and Environment organized by SSN College, University of Delhi and the School of Environmental Studies, **University of Delhi, Delhi**, Feb 2004.

## Administrative experience

1995 – 2004: In-charge, Environmental Society, Swami Shradhanand College,

1995 – 2000: Conducted certificate course for students on "Environmental Awareness" in association with Center for Science Education and Communication, University of Delhi